

REMARKS

Reconsideration is respectfully requested.

I. Status of the Claims

Claim 21 is cancelled without prejudice or disclaimer of the subject matter therein.

Claims 1-20 and 22 are pending.

II. Allowable Subject Matter

Applicants appreciatively acknowledge that claims 3-10 and 14 contain allowable subject matter, and that claims 18 and 19 are allowed.

III. Continued Examination Under 37 C.F.R. §1.114

Granting of the request for continued examination under 37 C.F.R. §1.114 and entering Applicant's submission filed on July 20, 2007 is noted with appreciation.

IV. Rejection under 35 U.S.C. §112

The Examiner rejects claim 21 under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement. Claim 21 is cancelled, rendering the rejection moot.

V. Rejections under 35 U.S.C. § 102

The rejection of claims 1-2, 11-13, 15-17, and 20 under 35 U.S.C. § 102(e) as being anticipated by Langley et al. (2004/0054328) is traversed.

The subject patent application as filed in the USPTO was published under Pub. No.: 2004/0073168 on April 15, 2004. In the Remarks below, when referring to the structure and/or operation of Applicant's invention, the paragraph numbers in Applicants' published application will be referred to for support.

The Examiner asserts on page 3, lines 8-16 that Langley discloses "...a control unit (not shown) configured to control a moving of the push member by controlling the drive motor, wherein the control unit controls the drive motor to move the push member to linearly increase an injection speed of the anesthetic at a constant, predetermined rate at the beginning of the injection and until reaching a selected injection speed, and then to move the push member to inject the anesthetic at the selected in a constant injection speed without further increase after a predetermined time has elapsed (the control unit has at least two speeds at which the push member can be moved, it is the Examiner's position that the push member linearly increased from zero to either speed)...."

This assertion by the Examiner is not supported by the Langley disclosure and is traversed. As will be shown below, Langley neither discloses nor even suggests the structure of a syringe as is disclosed and claimed by Applicants, that being that the syringe starts by injecting anesthetic into a person at a first low rate, then linearly increasing the speed of injection until a selected higher

injection rate is reached, and then continuing to inject the anesthetic at that higher rate without further increase. What Langley does disclose is that his syringe can inject anesthetic only at a constant fixed rate. Langley discloses a different rate that is used only to overcome the starting friction required to start the plunger moving, and then only in a new cartridge, not if the cartridge had been previously used.

Applicant's syringe includes a control unit which controls the drive motor to gradually and linearly increase the injection speed of the anesthetic from a low speed at the beginning to a higher final constant speed at the end. See last 6 lines in Par. [0017], underscoring added for emphases.

Referring now to the last 6 lines of Par. [0096], and to Fig. 8, the control substrate, as shown in Fig. 8, drives the drive motor "...so that the injection can be started as a low injection speed so as to be able to provide a very small anesthetic injection quantity in the beginning of the injection, the injection speed can be increased substantially at a given variation rate and, after the passage of a given period, the injection speed can provide a constant speed." (Underscoring added for emphasis).

Thus, Applicants disclose a syringe which starts by injecting anesthetic at a first low speed, then the speed at which the anesthetic is dispensed is increased at a variable rate until the speed of injection reaches a higher rate which is at a constant speed. Thus, in the invention, the anesthetic is

first injected into a person at a low rate, it is then ramped up to a higher rate, and stays at the higher constant rate to the end.

Referring now to Langley, the syringe injects anesthetic into a person at a constant speed. Nowhere does Langley disclose or even suggest that anesthetic is dispensed from the syringe at a low speed at the beginning, and is then ramped up at a uniform acceleration to a final constant speed. In Langley, referring to Par. [0065]...{Note- in line 4, the word “stiction” is misspelled, it should be --friction--}... the drive mechanism 42 operates at a constant speed during dispense. However, at the start of each new cartridge 40 a slower speed may be appropriate to **overcome friction** of the bung 48 in the cartridge 40. Clearly, Langley discloses that the speed of the drive mechanism may be reduced to overcome the starting friction only when starting a new cartridge. But, the speed at which the anesthetic is dispensed is always constant, it is never varied while it is being injected into a person. Continuing with Par. [0065], Langley states that “Alternatively, the speed of dispense may be controlled to suit the comfort of the user.” This statement is interpreted as meaning that Langley can inject the anesthesia into a person at a low fixed rate or at a higher fixed rate, not that the rate that the anesthesia is injected is varied from start to finish as is first disclosed and claimed by the Applicants.

Claim 1 clearly avoids Langley by reciting, in combination, that “... the control unit controls the drive motor to move the push member to linearly increase an injection speed of the anesthetic at a constant, predetermined rate at the beginning of the injection and until reaching a selected

injection speed, and then to move the push member to inject the anesthetic at the selected injection speed without further increase.” (Emphasis added).

Claims 2, 11-13, 16, 17, and 20 depend from claim 1 and, therefore, for the reasons noted above, also avoid the Langley reference.

Independent claim 15 recites that the “...the control unit controls the drive motor to move the push member to linearly increase an injection speed of the anesthetic at a constant, predetermined rate at the beginning of the injection and until reaching a selected injection speed, and then to move the push member to inject the anesthetic at the selected injection speed without further increase,” Claim 15 also clearly avoids the Langley reference for the reasons noted above for claim 1.

VI. Rejection under 35 U.S.C. §103

The rejection of claim 22 under 35 U.S.C. §103(a) as being unpatentable over Langley et al. (2004/0054328) is traversed. Claim 22 depends from claim 20, which depends from claim 1. For the reasons noted above, it is our understanding that claim 1 clearly avoids the Langley reference and, therefore, claim 22 also avoids the Langley reference.

In summary, for at least the above-argued reasons, Applicants submit that independent claims 1 and 15 are allowable. As claims 2, 11-13, 16, 17, and 22 each depend from one of independent claims 1 and 15, Applicants further submit that dependent claims 2, 11-13, 16, 17, and

22 are also allowable for at least this reason. Therefore, Applicants respectfully request that the rejection of claims 1-2, 11-13, 15-17, 20, and 22 be withdrawn.

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to pass this application to issue.

The Examiner is respectfully requested to contact the undersigned at the telephone number indicated below if the Examiner believes any issue can be resolved through either a Supplemental Response or an Examiner's Amendment.

Respectfully submitted,

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